

What is claimed is:

1. A motor comprising a rotor, a stator, a shaft, and a rolling bearing, one of the stator and the rotor being provided with a housing, the rolling bearing being provided between the housing and the shaft and having an inner race and outer race, the shaft having an outer peripheral surface, the housing having an inner peripheral surface, the inner race having an inner peripheral surface and the outer race having an outer peripheral surface, the inner race being fixed to the shaft through one of press-fitting and adhesion between the outer peripheral surface of the shaft and the inner peripheral surface of the inner race, the outer race being fixed to the housing through one of press-fitting and adhesion between the outer peripheral surface of the outer race and the inner peripheral surface of the housing, and at least one of the outer peripheral surface of the shaft and the inner peripheral surface of the housing being formed with knurled grooves, wherein the number (P) of the knurled grooves in the circumferential direction and the number (Z) of the rolling members in the rolling bearing are in the relations of  $P \neq nZ$  and  $P \neq nZ \pm 1$  where n is a positive integer.
2. A motor comprising a rotor, a stator, a shaft, and a rolling bearing, one of the stator and the rotor being provided with a housing, the rolling bearing being provided between the housing and the shaft and having an inner race and outer

race, the shaft having an outer peripheral surface, the housing having an inner peripheral surface, the inner race having an inner peripheral surface and the outer race having an outer peripheral surface, the inner race being fixed to the shaft through one of press-fitting and adhesion between the outer peripheral surface of the shaft and the inner peripheral surface of the inner race, the outer race being fixed to the housing through one of press-fitting and adhesion between the outer peripheral surface of the outer race and the inner peripheral surface of the housing, and at least one of the outer peripheral surface of the shaft and the inner peripheral surface of the housing being formed with knurled grooves, wherein the number (P) of the knurled grooves in the circumferential direction and the number (Z) of the rolling members in the rolling bearing are in the relation of  $P = nZ \pm X$ , where n is a positive integer, and X is 2 or an integer larger than 2.